



SIMPLIFIED E-CONTENT SYSTEM (SECS)

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EXECUTIVE SUMMARY

This project entitled “Simplified E-Content System (SECS)” which is a system created to help entrepreneurs who are "normal user" with less literacy in web technology and ICT who want to have their website to promote their products. Content Management System (CMS) in the market is good to use but it require a lot of steps to create some content thus making it hard for normal user. With this system, they only need to fill in information step by step inside this system and this system will help them to generate a website for them to promote their products. This system is focus on entrepreneurs who are "normal user" with less literacy in web technology and ICT. For the development process, Waterfall is chosen to be used in this project. Programming Hypertext Preprocessor (PHP), Cascading Style Sheet (CSS), JavaScript, Hypertext Markup Language (HTML), and MySQL are used to develop this system as the web programming language and database management respectively.

RINGKASAN EKSEKUTIF

Projek ini bertajuk “Simplified E-Content System (SECS)” di mana ini adalah satu sistem dicipta untuk membantu seseorang usahawan yang celik dalam teknologi dan ICT dan menginginkan laman web sendiri untuk mempromosikan produk sendiri. Walaupun Content Management System (CMS) dalam pasaran adalah sangat baik digunakan oleh orang ramai tetapi terdapat banyak langkah kena diikuti sekiranya mereka inginkan laman web sendiri. Hal ini membebankan dan menyusahkan seseorang itu. Dengan adanya system yang saya cipta ini, mereka hanya megisikan informasi yang diwajibkan ke dalam tempat yang tertentu dalam system ini dan system akan membantu mereka menghasilkan laman web mereka untuk memenuhi keinginan mereka dalam memiliki laman web untuk mempromosikan produk mereka. This sistem adalah ditujukan kepada usahawan yang celik dalam teknologi dan ICT dan menginginkan laman web sendiri untuk mempromosikan produk sendiri. Model Waterfall dipilih untuk digunakan dalam project ini. Programming Hypertext Preprocessor (PHP), Cascading Style Sheet (CSS), JavaScript, Hypertext Markup Language (HTML) dan MySQL digunakan dalam menghasilkan sistem ini.

TABLE OF CONTENTS

STUDENT’S DECLARATION	i
SUPERVISOR’S DECLARATION	ii
ACKNOWLEDGEMENT	iii
EXECUTIVE SUMMARY.....	iv
RINGKASAN EKSEKUTIF	v
1. INTRODUCTION	1
1.1 Project Overview.....	1
1.2 Statement of the Problem(s) and Description of the Main Aim(s) and Objective(s).....	2
1.2.1 Problem Statement	2
1.2.2 Objective	2
1.3 Review of Previous Work	3
1.4 Current System and Its Limitation	7
1.5 Terminology	8
1.6 Method of Approach	8
1.7 Indications of Scope and Limitations of the Study	9
1.8 Outline of Material Presented in Rest of Report	10
2. REPORT BODY	11
2.1 Introduction.....	11
2.2 Requirements Analysis.....	12
2.3 Design	13
2.3.1 Flow of the Whole System.....	13
2.3.2 Use Case.....	15
2.3.3 Flowchart of every module according to Entrepreneur Part Use Case	16
2.3.4 Flowchart of every module according to Customer Part Use Case.....	19
2.3.5 Data Dictionary	20
2.3.6 Entity Relationship (ER) Diagram	22
2.3.7 Interface of the system	23
2.3.8 Technology used to develop this system	32
2.4 Development	34
2.4.1 Coding Explanation.....	34
2.5 Implementation	37
2.5.1 System Output.....	37

2.6 Testing.....	42
2.6.1 Functionalities Testing.....	42
2.6.2 User Testing	58
2.7 Maintenance	62
3. CONCLUSION	63
3.1 Conclusion and Recommendation.....	63
REFERENCE.....	64
APPENDICES	65
APPENDIX A	65
APPENDIX B	74
APPENDIX C	81
APPENDIX D	84

LIST OF FIGURES

Figure 1.1: Drupal Dashboard.....	4
Figure 1.2: Joomla Dashboard	5
Figure 1.3: WordPress Dashboard	6
Figure 2.1: Website Generate Module (Entrepreneur).....	13
Figure 2.2: Backend of Created Website Module (Entrepreneur).....	14
Figure 2.3: Entrepreneur Part Use Case	15
Figure 2.4: Customer Part Use Case	15
Figure 2.5: Step 1 Fill In Information and Save Information Website Generate Module (Entrepreneur).....	16
Figure 2.6: Step 2 Add Product and Save Product Website Generate Module (Entrepreneur) ...	16
Figure 2.7: Step 3 Edit Information Website Generate Module (Entrepreneur)	17
Figure 2.8: Login Module (Entrepreneur).....	17
Figure 2.9: Reset Password Module (Entrepreneur)	18
Figure 2.10: Check Availability and Choose and Add Product Module (Customer)	19
Figure 2.11: ER Diagram	22
Figure 2.12: Step 1-Company Registration Interface.....	23
Figure 2.13: View Created Website Interface.....	23
Figure 2.14: Step 2-Product Setup Interface	24
Figure 2.15: Step 3-Edit, Preview and Publish Interface	24
Figure 2.16: Step 3-Edit Interface (Website Cover Photo)	25
Figure 2.17: Step 3-Edit Interface (Website Logo).....	25
Figure 2.18: Step 3-Edit Interface (Information)	25
Figure 2.19: Step 3-Edit Interface (Product Information).....	25
Figure 2.20: Front End Website Interface.....	26
Figure 2.21: Entrepreneur Forget Password Interface	26
Figure 2.22: Back End Website Interface-Order List	26
Figure 2.23: Back End Website Interface-Manage Portal.....	27
Figure 2.24: Manage Portal -Edit Interface (Website Cover Photo).....	28
Figure 2.25: Manage Portal -Edit Interface (Website Logo)	28
Figure 2.26: Manage Portal -Edit Interface (Information).....	28
Figure 2.27: Manage Portal -Edit Interface (Product Information).....	28
Figure 2.28: Front End Website Interface-Customer Fill In Personal Information	29
Figure 2.29: Front End Website Interface-Customer Choose and Fill Quantity of Product	30
Figure 2.30: Front End Website Interface-Customer Add Cart	31
Figure 2.31: Front End Website Interface-Customer Checkout Cart.....	31
Figure 2.32: Front End Website Interface-Customer Invoice	32
Figure 2.33: Data stored in database	34
Figure 2.34: Image data retrieve from database.....	35
Figure 2.35: Text data retrieve from database.....	35
Figure 2.36: Reset password	36
Figure 2.37: Website created by entrepreneur.....	37
Figure 2.38: Website viewed by entrepreneur	38

Figure 2.39: Backend of the created website.....	39
Figure 2.40: Password reset flow	40
Figure 2.41: Flow of customer filling information and choosing information in front end website	41
Figure 2.42: Question 1.....	59
Figure 2.43: Question 2.....	60
Figure 2.44: Question 3.....	60
Figure 2.45: Question 4.....	60
Figure 2.46: Question 5.....	61
Figure 2.47: Question 6.....	61
Figure 2.48: Overall Satisfaction	62

LIST OF TABLES

Table 1.1: Comparison Table.....	7
Table 1.2: Abbreviation Table	8
Table 2.1: User Requirement Table	12
Table 2.2: register Table	20
Table 2.3: productlist Table	20
Table 2.4: customer Table.....	21
Table 2.5: cartlist Table	21
Table 2.6: link Table	21
Table 2.7: Requirement Fulfillment Table.....	42
Table 2.8: Survey Percentage Table 1.....	59
Table 2.9: Survey Percentage Table 2.....	61

1. INTRODUCTION

1.1 Project Overview

Website is a common term nowadays. It is a collection of text documents and other resources, linked by hyperlinks and URLs, usually accessed by web browsers from web servers. In short, the web can be thought of as an application "running" on the Internet. [Wikipedia]

Nowadays, Content management system (CMS) is available for all users who want to own a websites. Content management system (CMS) is a system created to help users to generate their desire website by them. This system allows users publishing, editing and modifying content as well as maintenance from a central interface. [Wikipedia] But, the learning curve is steep for people who is "normal user" with less computer literacy and little or no knowledge in web technology (html, FTP, MySQL, etc.)

Previously, companies who want to have their website for their company, they have to have one or even a group of professional web developers to help them to build and maintain their company website. Small businesses are unable to own website because of unable to hire professional web developers.

The system that is going to be developed is the SECS that will focus mainly on entrepreneur who is "normal user" with less computer literacy and little or no knowledge in web technology (html, FTP, MySQL, etc.) and wish to have their website to do their business for their small scale production of homemade products. They will only need to fill in the required information step by step to produce their website. They only need to edit the information by clicking the "edit" button/link in preview page without need to remember and find the path to edit information such as text or image.

1.2 Statement of the Problem(s) and Description of the Main Aim(s) and Objective(s)

1.2.1 Problem Statement

For user with high literacy in web technology and ICT, it will not be a problem for them to create static website or using complex CMS features but with "normal user" with less literacy in web technology and ICT, it will be a major problem. As such, following problem statements are being constructed in regard to normal user perspective.

1. Static website is not suitable for normal user because lack of knowledge in computer and little or no knowledge in web technology (html, FTP, MySQL, etc.)
2. Typical CMS nowadays require a lot of steps to create some content thus making it hard for normal user.
3. In typical CMS, user has to enable the integrated components according to module map in order to have a full webpages. It is difficult for normal user who is lack of knowledge in computer and little or no knowledge in web technology (html, FTP, MySQL, etc.)

1.2.2 Objective

1. To develop a system that able to generate a dynamic website consists of text, image and database using form filling based in SECS.
2. To minimize steps in producing website using form filling based format.
3. To provide integrated components within a standard template for normal/novice user.

1.3 Review of Previous Work

➤ Drupal

Drupal is an open-source content management platform that allows anyone to publish, manage and organize a wide variety of content on a website. [8] It can be used to create website from personal blogging site, online shopping site, and commercial site to corporate business website. Commercial users of Drupal include newspapers and corporate business sites (David Gwynn, 2009) Drupal consists of its standard distribution which called Drupal Core. Inside Drupal Core, it contains 30 basic modules. It can be expanded by adding additional features or modules to enhance the functionality and design in creating website in order to meet user's need. (Nood.org team, 2009) The site templates are predominately made up of XHTML and CSS and also PHP to insert content from system into the correct spots. (Niraj Singhal, Tanmeya Mohan, Subham Sarkar, 2009)

The administration page of Drupal offer capability of managing the content of the website by adding articles and paging and managing it through menu. In addition, users can change the appearance of their websites by add on different templates. It also provides users with the user management functionality such as user status and so on. Drupal provides the unique functionality of dashboard, which gives the capability to the user to rearrange all the blocks that appear on the site in any way the users like. (B V Wakode, D N Chaudhari, 2013)

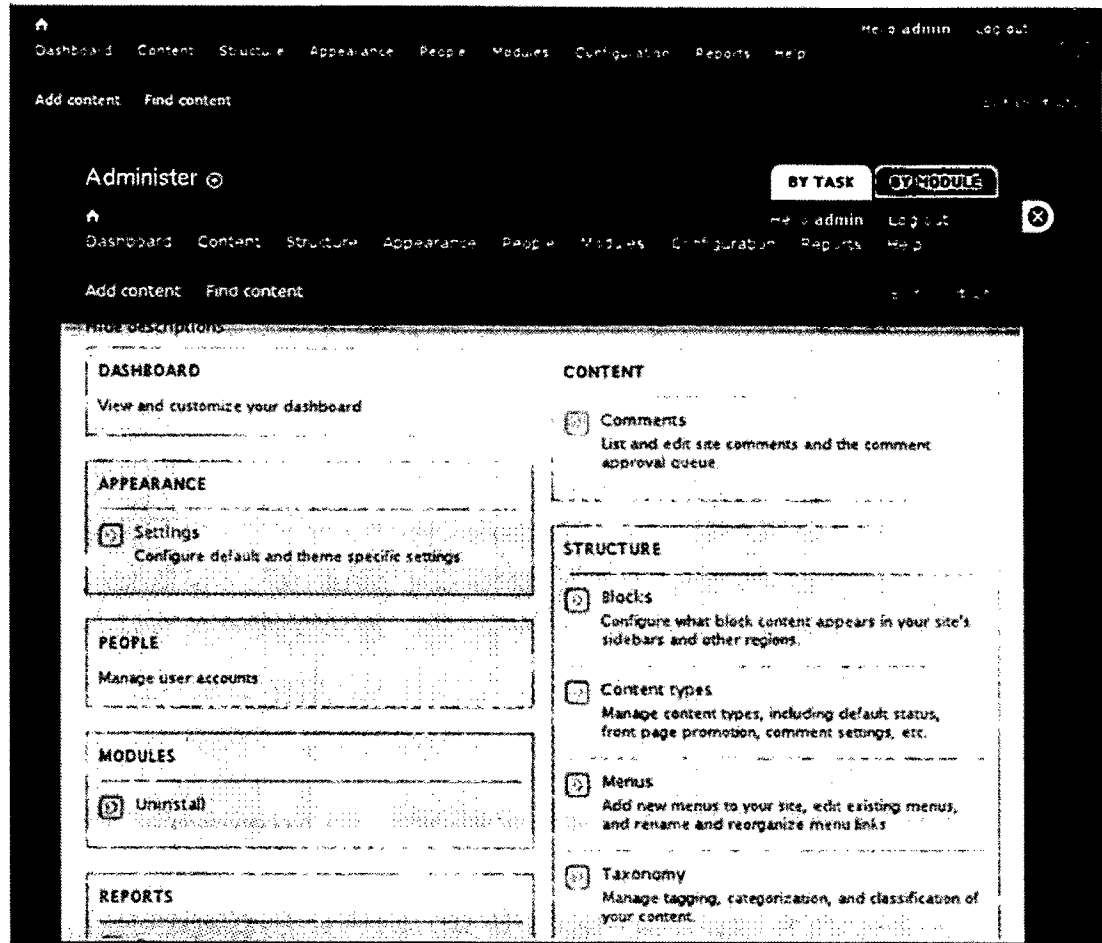


Figure 1.1: Drupal Dashboard

➤ Joomla

Joomla is an open source solution that freely available to everyone who want to create website. [9] It is an open source PHP and SQL based application which it is written in PHP scripting language and MySQL database for backend of the system created. The combination of PHP, CSS and HTML provide flexibility in creating a website. (Niraj Singhal, Tanmeya Mohan, Subham Sarkar, 2009) From beginners in building their website till IT professional help corporate manage website, every stage of users be able to create their desire website using Joomla.

In Joomla administration page, it provides users with a big number of functionalities. It can let users add more content such as new articles, uploading numbers of media files through media manager, add new categories in the main page for the content and so on. Additionally, users are able to apply different template to change the visual aspect of their websites. In addition, users can add on modules or extensions to improve the functionalities of their websites. (Konstantinidis Konstantinos)

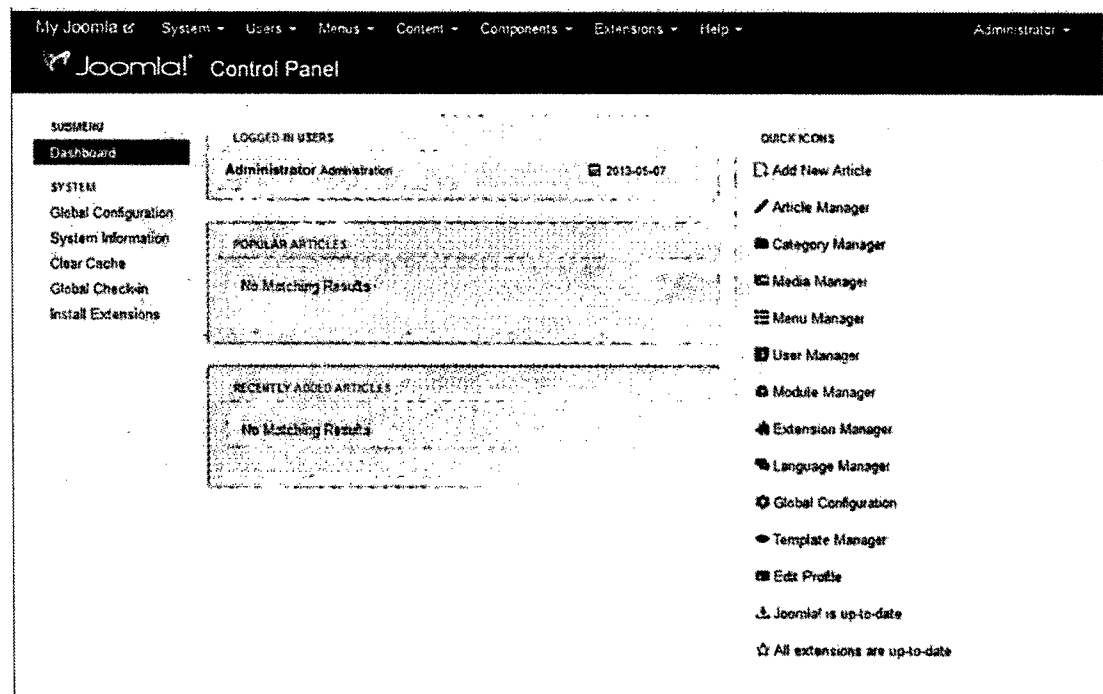


Figure 1.2: Joomla Dashboard

➤ WordPress

WordPress is a full-blown Content Management system that used to create website or blog. It is an enhancement of the blogging platform. It has grown to be the largest self-hosted blogging tool in the world, used on millions of sites and seen by tens of millions of people every day. [10] Wordpress offers a significantly simpler codebase than Joomla or Drupal. (David Gwynn, 2009)

It also has a modular structure that facilities add on to customize and extend page content. It also features a user-friendly and simple interface for website. (David Gwynn, 2009)

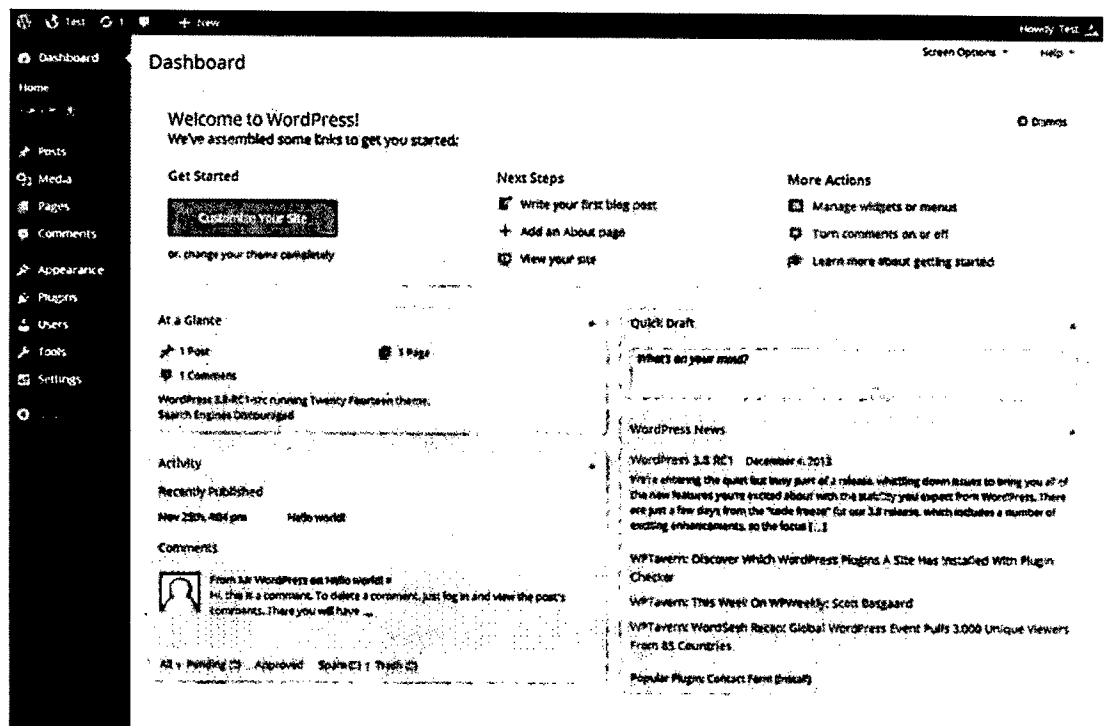


Figure 1.3: WordPress Dashboard

1.4 Current System and Its Limitation

Table 1.1: Comparison Table

	Drupal	Joomla	WordPress	Simplified E-Content
Steps on insert image	4	4	4	3
Pathway to insert image into webpage	Click “Content->Edit”, then inside the page that want to be edited, select “browse” and	Go to Content in dashboard and choose Media Manager	Go to dashboard and choose the page that want to add image then click “Add Media” button	Direct fill in inside the step which image needed.
Pathway to insert text into webpage	Need to go to “Add Content” to insert text into webpages	Need to go to “Content->Article Manager” to insert text into	Need to go to “Design->Widgets->Text Widgets”	Direct fill in inside textbox provided in the step.
Pathway to edit image in webpage	Click “Content->Edit”, then inside the page that want to be edited, select	Go back to dashboard and to the Media Manager	Go to “Media->Library”, then click the image you wish to edit.	Direct edit in the preview page with edit button /link provided
Pathway to edit text in webpage	Click the edit link at the page that want to be edited	Need to go to “Module Manager” or “Components” to edit text	Need to go back to Dashboard and click “Pages menu” and choose which	Direct edit in the preview page with edit button /link provided
Straightly one way in inserting information(text, image)	No (required to go to specific modules)	No (required to go to specific manager)	No (required to go to specific modules)	Yes (step by step form filling format)

Full template is provided	Yes (User requires enabling the features before use.)	Yes (User requires enabling the features before use.)	Yes (User requires enabling the features.)	Yes (User no needs to enable any features.)
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1.5 Terminology

Table 1.2: Abbreviation Table

Abbreviation	Definition
CMS	Content Management System
CSS	Cascading Style Sheet
HTML	Hypertext Markup Language
PHP	Hypertext Preprocessor
SQL	Structured Query Language

1.6 Method of Approach

To develop this system, I will use:

- Software
 - Notepad ++
 - Hardware
- Programming Language
 - Programming Hypertext Preprocessor (PHP)
 - Cascading Style Sheet (CSS)
 - JavaScript
 - Hypertext Markup Language (HTML)
 - MySQL

1.7 Indications of Scope and Limitations of the Study

The scope for this system consists of two parts which are user and system.

- User
 - The user of this system is entrepreneurs who is “normal user” with less computer literacy and little or no knowledge in web technology (html, FTP, MySQL, etc.) sell small scale production of their homemade products
- System
 - This system will be a web-based system.
 - Menu bar, breadcrumb and section navigation are integrated in the system.
 - This system will help “normal user” with less computer literacy and little or no knowledge in web technology (html, FTP, MySQL, etc.) generate website for business purpose.

Limitation of the study

There is a limitation for this system. There is:

- The edit form is not in pop up window which user can also view the preview page while edit the information in pop up form.

1.8 Outline of Material Presented in Rest of Report

This technical report consists of three parts. The first part consists of introduction, problem statements, objectives, scopes for the project. Besides that, review of previous works, their limitation and explanations of terminology used also a part of the first part. Furthermore, method of approach, Indications of scope and limitation also include inside first part.

The second part consists of explanation of the methodology chosen to develop this system. Every step in the methodology chosen is explained in detail with user requirements, flow chart, diagrams and method use included respectively.

The third part which also the last part is about the conclusion for the report and overall system. This part is to conclude and summarize the points for the report and overall system.

2. REPORT BODY

2.1 Introduction

The software development model that I used for my system is Waterfall Model. Waterfall model is a linear-sequential life cycle model. It is easy to understand and simple to use. Every step must be completed before next step take place. The phases in Waterfall Model are as follow:

- Requirement analysis
- Design
- Development
- Implementation
- Testing
- Maintenance

Why Waterfall Model is used?

In my system, the use of Waterfall Model is appropriate because of:

- My project duration is short.
- The requirements that needed to produce my system are very well documented and clear.
- There are no ambiguous requirements.

2.2 Requirements Analysis

An interview was carried out with client to get detailed requirements for the system. Before getting requirements from client, a research on the related existing system was done and comparison was made. The requirements list was finalized and in a structure manner. The following are the requirements specified by my client who is one of person in charge in the project:

Table 2.1: User Requirement Table

Number	Description
1.	Entrepreneurs need to fill in required information which is company information, financial information, and personal information in step 1 before proceeds to step 2.
2.	After finish filling in Step 1, entrepreneurs need to fill in information for all products that they want to sell in Step 2.
3.	The information that they fill in in Step 1 and 2 will show in Step 3 which is preview page.
4.	In Step 3 which is preview page, entrepreneurs can view and edit information that they key in in Step 1 and 2.
5.	The update parts in preview page are divided into 4 parts which are at the website cover photo part, website logo part, information part and product information part. Each part will have an update link or button.
6.	In Step 3 which is preview page, they can edit the information by clicking the update button or link inside the preview page
7.	Each website produced must have their folder individually.
8.	Entrepreneurs can go to backend of their website to edit information in the website and view customer order list.
9.	Only entrepreneurs can go to backend of their website and username and password is required to pass through.
10.	If entrepreneur forget password, entrepreneur can reset password through "Forget Password" link.
11.	After submit to produce website, entrepreneur can view back their website anytime by clicking "View Created Website" button at "Step 1"page. Entrepreneurs will open their website through the link.
12.	User need to fill in personal information before choosing product.
13.	After submit the personal information, click "Enable" button to fill in quantity the quantity they want for particular product they want to buy. After writing the quantity, users need to click "Add Cart" button to add the product to list of products that they want to buy. Users need to click "Enable" button every time user to buy product
14.	When user finish add cart, click "Checkout" button to go to the list of product that they want to buy together with the personal information filled.
15.	Users can update the information or change the product that they want to buy and confirm the product before submit.

16.	After submitting the Checkout list, the products inside the Checkout list will go to the backend customer order list to let entrepreneur have the record and customers/users will receive an invoice of the price of products that they bought.
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2.3 Design

2.3.1 Flow of the Whole System

The two flowcharts which are Figure 2.1 and Figure 2.2 below are the flow chart of the system.

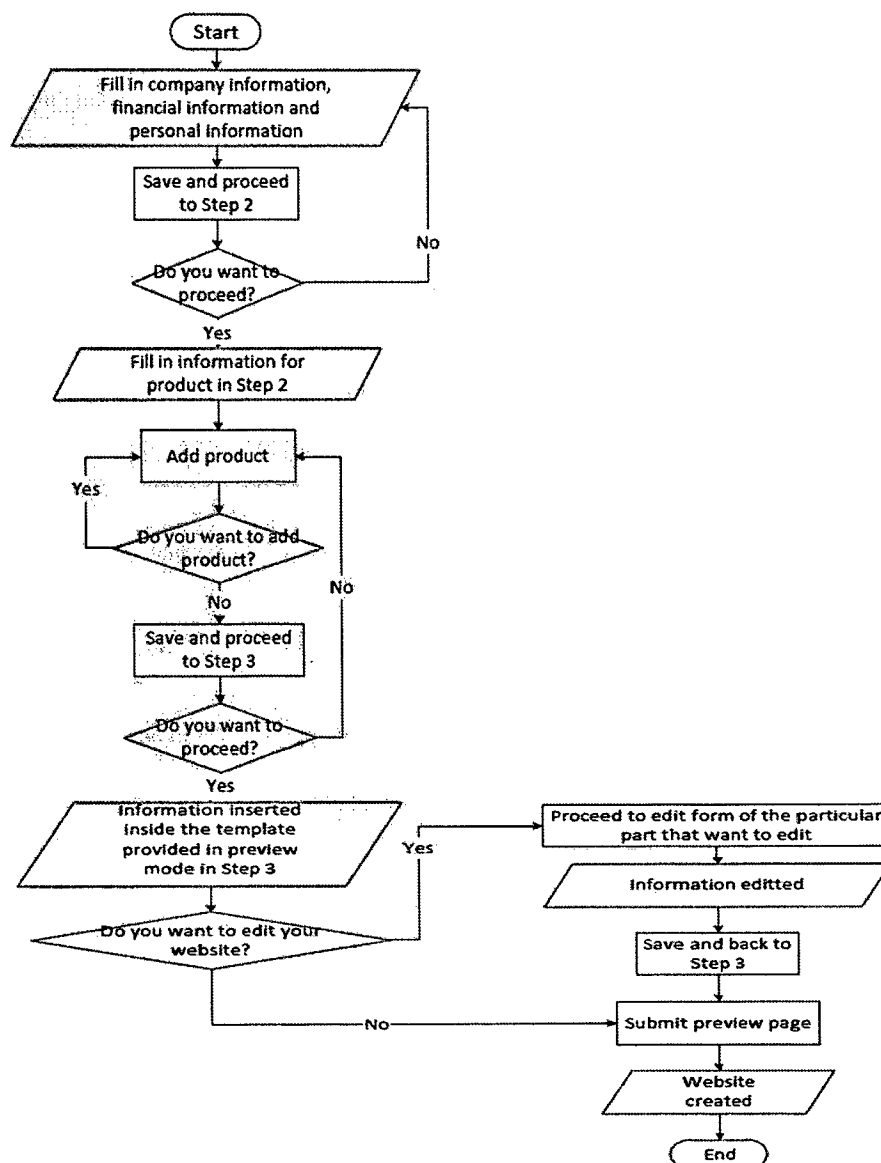


Figure 2.1: Website Generate Module (Entrepreneur)

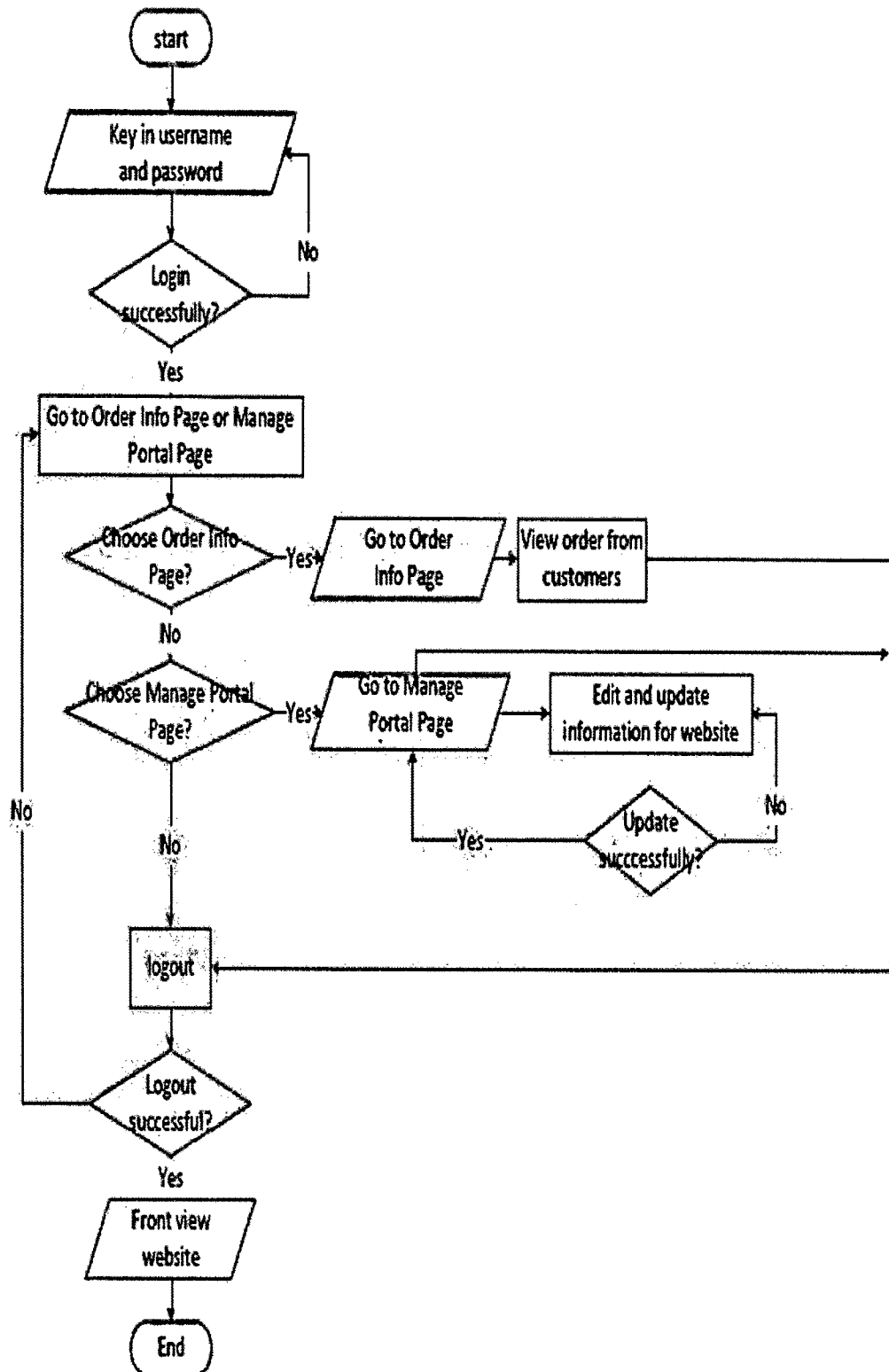


Figure 2.2: Backend of Created Website Module (Entrepreneur)

2.3.2 Use Case

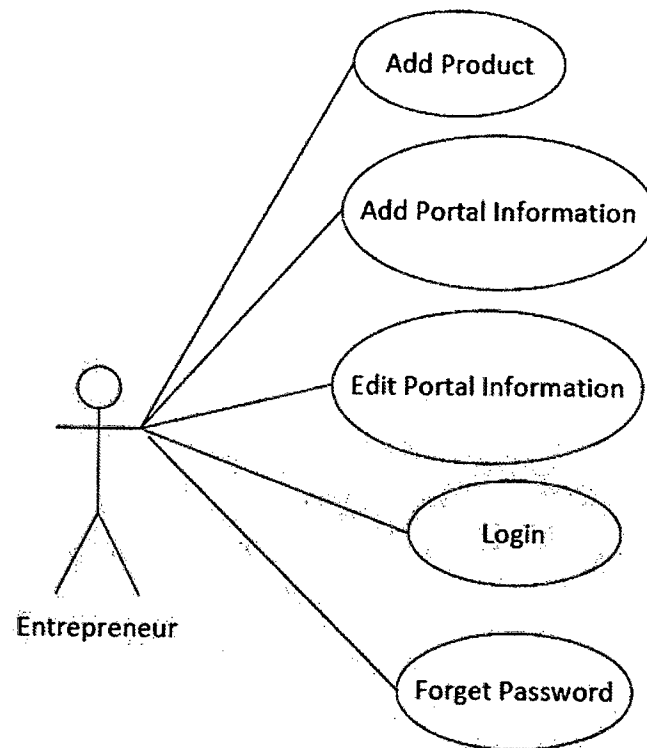


Figure 2.3: Entrepreneur Part Use Case

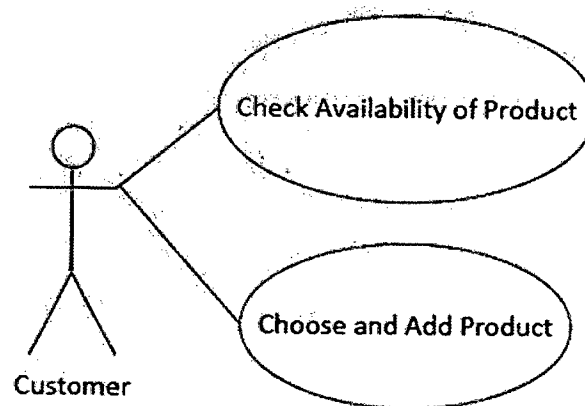


Figure 2.4: Customer Part Use Case

2.3.3 Flowchart of every module according to Entrepreneur Part Use Case

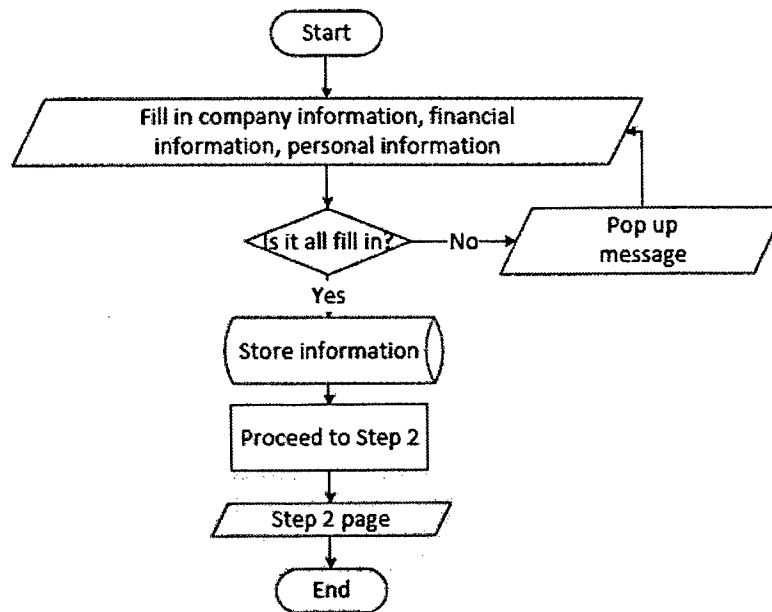


Figure 2.5: Step 1 Fill In Information and Save Information Website Generate Module (Entrepreneur)

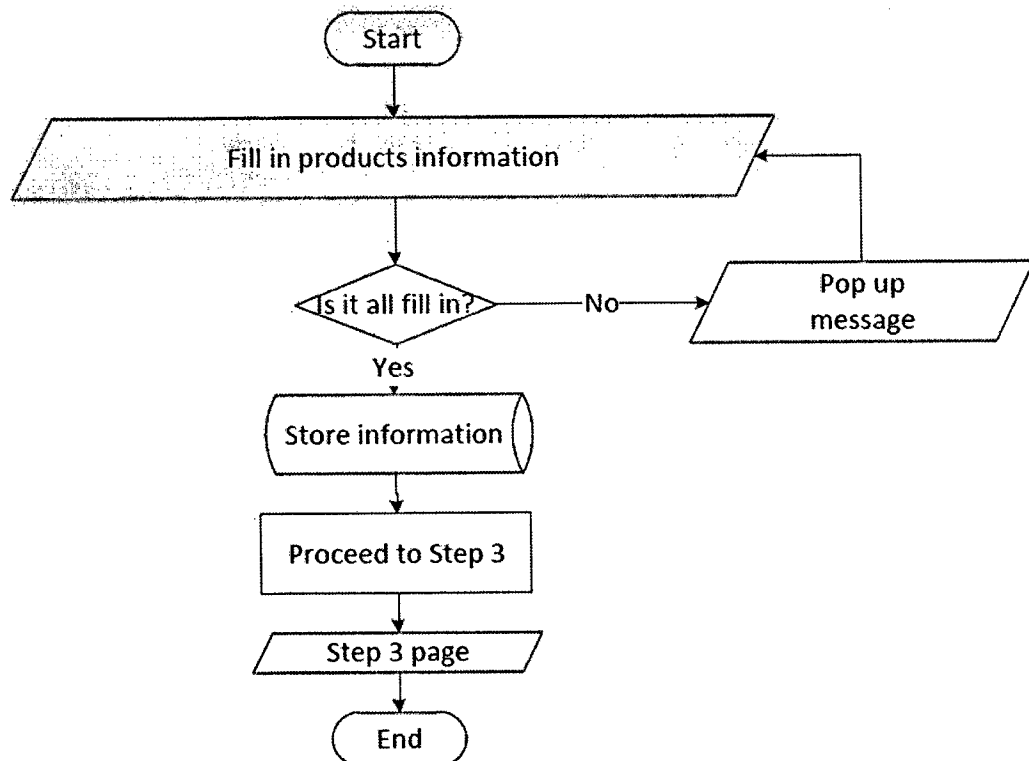


Figure 2.6: Step 2 Add Product and Save Product Website Generate Module (Entrepreneur)